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## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 59-015839

(43)Date of publication of application : 26.01.1984

(51)Int.Cl.

G01N 21/03

(21)Application number : 57-124851

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(22)Date of filing : 16.07.1982

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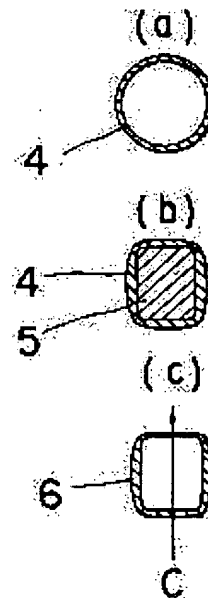
## (54) MANUFACTURE OF MEASURING CELL

## (57)Abstract:

PURPOSE: To hold the accuracy of the optical path length with an error within  $6\pm 0.01\text{mm}$  eliminating corners perpendicular to each other by a method wherein after a die is inserted thereinto, a glass tube is heated under a reducing pressure to be adsorbed on the die and then, finished by polishing following the pulling out of the die after being cooled.

CONSTITUTION: A die 5 is inserted into a light transmitting hard glass tube 4 with a better chemical resistance. The die 5 employs carbon tool steel higher than the softening point of the glass tube 4 and large in the coefficient of linear expansion. As the glass tube 4 is heated soft reducing pressure in a clearance between the glass tube 4 and the die 5, it 4 is absorbed on the die

5. When the tube is cooled under such a condition, a gap is produced between the glass tube and the die because of a difference in the coefficient of the linear expansion and after the die 5 is pulled out, the circumferential surface of the glass tube 4 is polished to finish a measuring cell 6. This eliminates corners perpendicular to each other thereby holding the accuracy of the optical path length with an error of  $6\pm 0.01\text{mm}$  as being required.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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